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FR1

USER'S INSTRUCTION MANUAL

FOREWORD

Please read and follow all instructions in this User's Instruction Manual before attempting to operate your scooter for the first time. If there is anything in this manual that you **DO NOT** understand, or if you require additional assistance for setting it up, contact your authorized dealer.

Using your product safely depends upon your diligence in following the warnings, cautions and instructions in this manual.

A full technical specification can be found at the rear of this manual.

Using your scooter safely also depends upon your good judgment and / or common sense, as well as that of your Provider, Caregiver or Health Professional.

Always think safety!

CONTENTS

Introduction 3
Purpose Of Your Scooter 3
Rules For Safe Use 4
Getting To Know Your Scooter 6
Operating Your Scooter 7
Freewheeling Your Scooter 14
Safety Instructions & Warning 14
Safety Warning & Instruction Labels 16
Learning To Get About 16
Care & Maintenance 18
Batteries And Battery Charging 20
Basic Fault Finding 22
Technical Specification 25
Classification 27
Optional Accessories 28
Guarantee Terms 29
Service History 30

INTRODUCTION

Congratulations on the purchase of your scooter. Please read this User's Instruction Manual carefully before you attempt to operate your scooter. Your User's Instruction Manual will assist you to get the most from your machine.

This manual contains important information regarding the safe operation and maintenance of your scooter.

If you have any queries concerning operation or maintenance, consult your authorized dealer.

Please keep in mind that the operator of the scooter is responsible for hazards occurring to other people or their property.

Your scooter has numerous features not found on other power scooters. With proper care and maintenance, you will enjoy many years of dependable service.

Please remember that when it comes to service and repairs, your authorized dealer knows your scooter best.

PURPOSE OF YOUR SCOOTER

The scooter provides transportation for an elderly or disabled person. It can be used in a variety of indoor and outdoor settings.

The intended user should possess some degree of ability with the use of both arms and hands, reasonable balance and good eyesight, and a degree of spatial awareness.

The user should have received training in the use of the product, preferably in their normal environment.

Your scooter should not be used in torrential rain or deep snow, on loose slippery surfaces and slopes or on wet grass etc., which could become a danger to the rider, or other road users.

DO NOT drive your scooter if you are under the influence of alcohol, drugs or medication that may affect your ability. If you are in doubt, consult your doctor.

RULE FOR SAFE USE

These symbols below are used in this User's Instruction manual to identify warnings and cautions. It is very important for you to read and understand them.

Warning: Failure to note the warnings in this user's manual may result in personal injury.

Your scooter is a powerful machine. Please read all of the instructions in this manual before operating your scooter. Follow notes carefully to ensure safety at all times.

ALWAYS make certain your machine is fully charged and in full working order before starting your journey.

Weight Limitations:
Your scooter is rated for a maximum weight capacity of 400 lbs (182 kg).

1. **DO NOT** ride your scooter without reading this instruction manual. Also read all of the safety instructions and warning at the start of this manual.

2. **ONLY** drive your scooter if your health condition will allow you to be safe.

3. **DO NOT** exceed the maximum safe gradient outlined for your vehicle.

4. **DO NOT** carry passengers or exceed the maximum carrying weight.

5. **DO NOT** reverse your scooter onto uneven inclines or surfaces. Be cautious when traversing slopes.

6. **DO NOT** drive your scooter in a confined space unless the speed adjustment dial is set low.

7. **DO NOT** turn suddenly at full speed, especially on uneven or sloping ground.

8. **DO NOT** drive your scooter where you cannot safely or legally walk.

9. **DO NOT** drive your scooter unless the seat is locked into the driving position.

10. **DO NOT** drive your scooter over deep, soft terrain (eg. soft earth, deep grass, loose gravel, snow).

11. **DO NOT** drive when under the influence of alcohol or certain drugs which may impair your safety.

12. **DO NOT** climb or descend curbs that exceed the maximum dimension detailed under technical specification of this manual. **DO NOT** turn when negotiating curbs.

13. **ALWAYS** approach obstacles at low speed.

14. **ALWAYS** approach obstacles straight.

15. **ALWAYS** keep your feet on the vehicle when driving.

16. **ALWAYS** proceed carefully while riding, especially as you approach the downgrade of a ramp.

17. **ALWAYS** reduce speed when descending inclines.

18. **ALWAYS** avoid uneven surfaces.

19. **ALWAYS** consult your physician or a therapist if in doubt about your ability to operate a scooter.

20. Transport - **DO NOT** sit on your scooter while it is in a moving vehicle. **ALWAYS** strap down your scooter then transfer to the vehicle seat.

21. The batteries fitted to your scooter are maintenance free and **DO NOT** require topping up with distilled water.

22. **DO NOT** drive your scooter through deep water or clean with a high pressure hose.

23. **DO NOT** drive your scooter through sea sand or sea water, this is very corrosive.

    ALWAYS wash salt splashing from the metal parts of your scooter with hot soapy water as soon as possible.

24. **DO NOT** drive on motorways, highways (i.e. those with a speed limit of over 50mph), cycle lanes or in bus lanes.

25. **ALWAYS** switch your lights on at night or in poor visibility. Wear reflective clothing.

26. If unintended movement or brake release occurs, turn the scooter OFF as soon as it is safe.

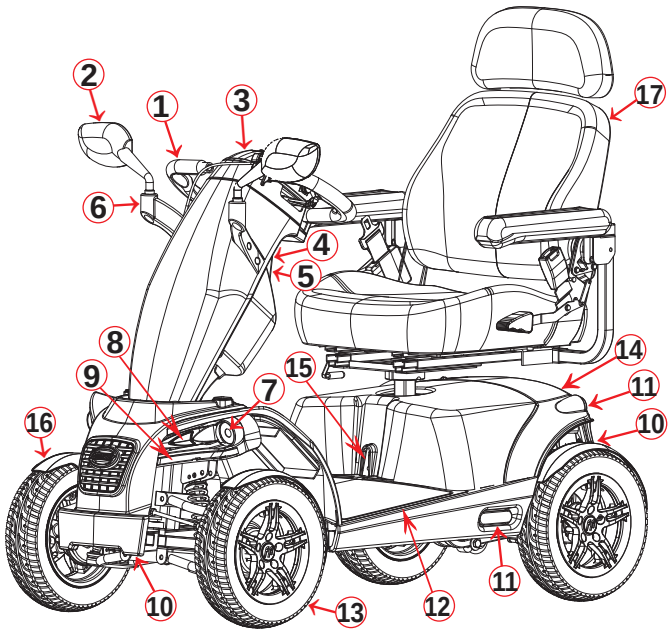
27. Report all incidents of unintended movement or brake release to the scooter local dealer, and note whether there is a source of EMI nearby.

    Please remember you are a motorized pedestrian and must observe all rules and regulations of other pedestrians wherever possible. Your scooter has been designed for use on most roads; drive with due care and attention. Reading the **"Safety instructions and warning"** section of this manual.

Please have a safe journey

GETTING TO KNOW YOUR SCOOTER

1. Steering Handbars
2. Driving Mirror
3. LCD Console
4. Off-board Charger Port
5. USB 5V Power Outlet
6. Mirror Bracket
7. Front LED Lights
8. Direction Indicator Lights
9. Daytime Running Lights
10. Front And Rear Bumpers
11. Side And Rear Reflectors
12. Floor Mat
13. 13"Aluminum Alloy Sporty Wheels
14. 3 Functions In One Rear Lighting (Rear Light/Indicators/Auto Brake Light)
15. Main Circuit Breaker
16. Mudguards For All Wheels
17. Adjustable Angle Seat With Backrest



Your scooter is delivered fully assembled, fitting the two batteries and the seat assembly together with some minor adjustments are detailed on the following pages, under **"Operating your scooter"**. A full technical specification for your scooter can be found at the rear of this manual.

A great deal of thought has gone into the design of your four wheeled vehicle which will allow you to negotiate obstacles found in confined shopping areas. Also, the four wheels will give you added stability on uneven surface. This is just one of the features you will find on your scooter.

Others are:

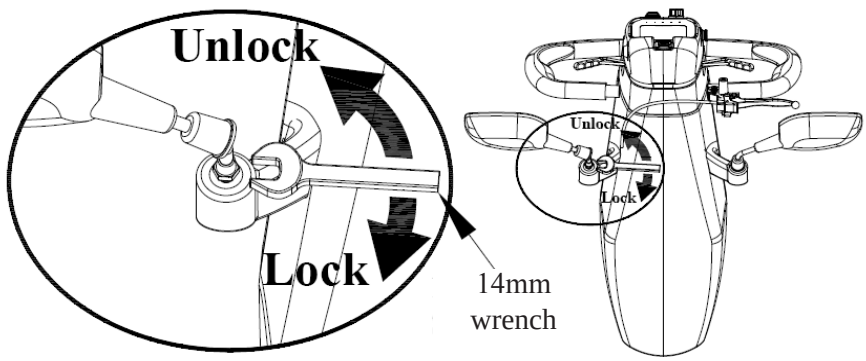
COMFORT - The contoured seat giving you day-long comfort. A fully proportional speed-controller with a speed restriction facility allows you a smooth, safe jerk-free ride.

Caution: **DO NOT** switch **"off"** the on/off power key when you are moving; this will automatically apply the motor parking brake suddenly and could place you in a dangerous situation. Your scooter is fitted with anti-tipping wheels. **DO NOT** remove these anti-tipping wheels, they are an important part of the scooter design provided specifically for your safety.

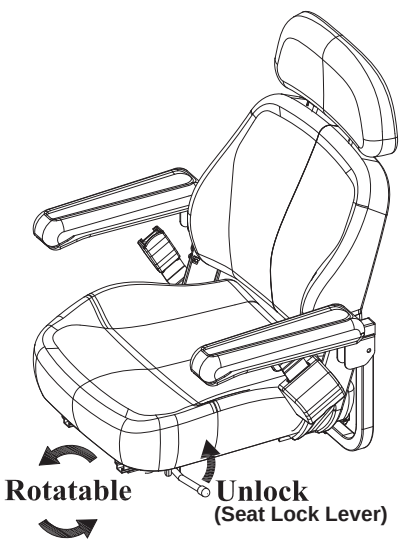
OPERATING YOUR SCOOTER

Before setting out on your scooter you need to make sure that your seat is in the correct driving position. The seat has three basic adjustments to assist your comfort.

1. Mirror Assemble:



Mirror Assemble



Seat Lock

2. Seat Lock Lever:

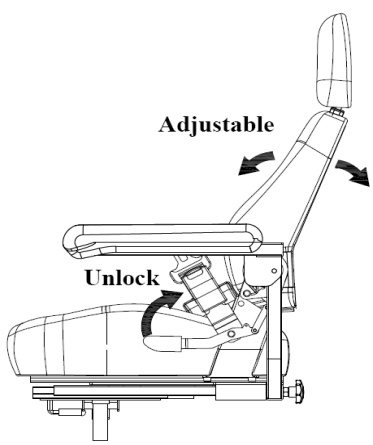
This allows the seat to swivel through 360 degree. Pull up the seat lock lever fully to release the seat allowing rotation. Release lever to lock the seat into the desired position.

Caution: The seat locking lever must be locked in place and be lifted up fully when rotating the seat, failure to observe this may result in unnecessary wear of the seat post.

Removing seat from Scooter:

Note: When you want to remove the seat you must go through a special lifting point on the mounting post. This lifted point is 90 degree counting from the horizontal direction.

(1) Pull up seat lock lever fully.
(2) In the meantime rotate the seat to 90 degree from the straight ahead position.(either left or right side)
(3) Lift up and remove the seat carefully.



Seat Back Adjusted

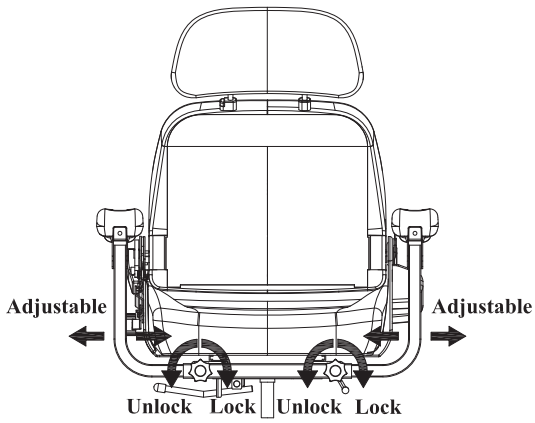
3. Seat Back Adjusted:

(1) Pulling up on the seat back adjustment lever, lean forward or backward to adjust the seat back.
(2) Release the seat back adjustment lever once the seat is in a comfortable riding position.

Note: The seat back angle can be adjust to a maximum angle of 102.8 degree.

4. Armrest Width Adjustment:

On each side at the rear of the seat you will find a large black knob. By simply loosening this knob you are able to slide the armrests in or out to whatever width you desire. Re-tighten the knobs fully.



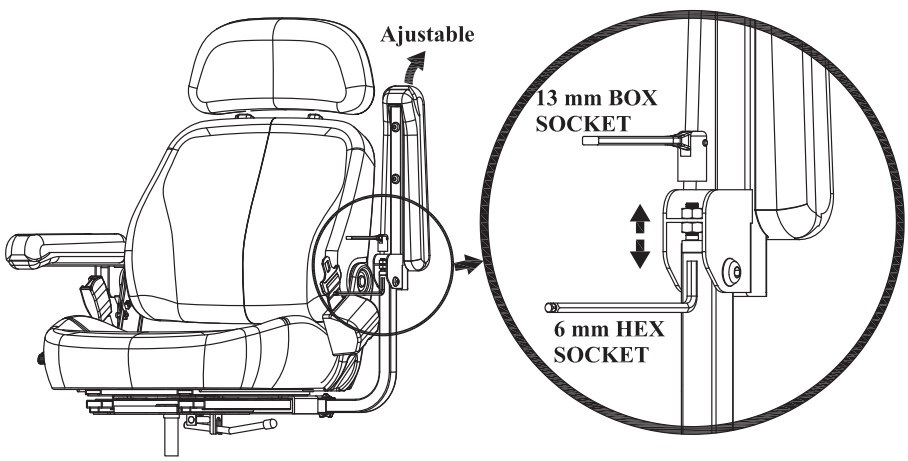
Warning: DO NOT drive your scooter with the arms removed or in the raised position.

5. Armrest Angle Adjustment:

The armrest angle can be adjusted individually to suit your needs. To make adjustments to the armrest angle you will need a 13mm box socket and 6 mm hex socket (not provided).

Lift the arm upwards, you will note the adjusting bolt. First loosen the locking nut, rotate the bolt in or out until the required angle is found, lower the arm and check the angle for comfort; re-adjust as necessary.

Finally the tighten locking nut.



6. Seat Height Adjustment:

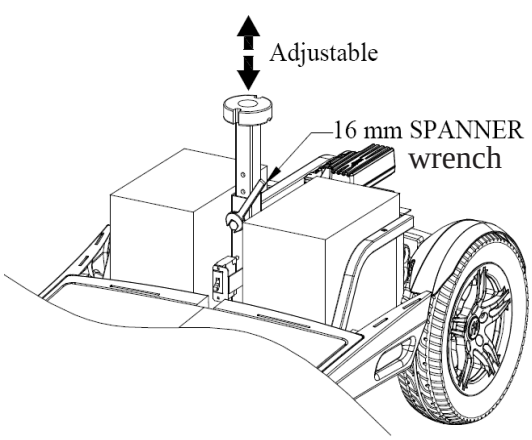
You may need to alter the seat height setting at a later date, please follow these instructions.

(1) Remove your seat from the scooter by lifting the seat.

(2) With the aid of a 16mm wrench (not supplied) loosen the 10mm seat clamp fixing bolt from side of seat post. Remove the 10mm fixing bolt and reposition the bolt into one of the four preferred location holes of the seat mounting tube.

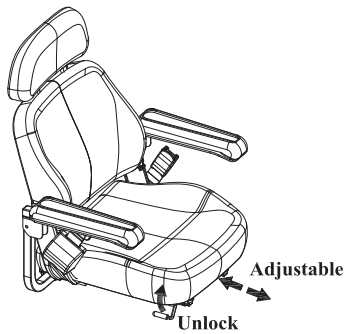
(3) Re-tighten the 10mm fixing screw.

(4) Refit the seat onto your scooter.

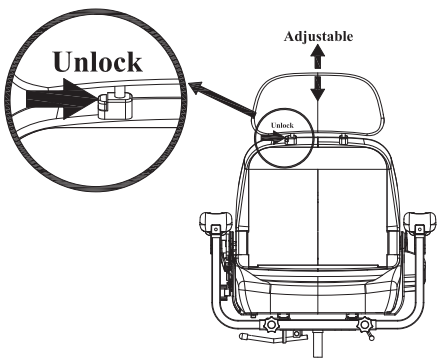


7. Seat Slide:

Located on the right front side of the seat. The lever allows you to adjust your seat forwards and backwards when sitting on the seat. Simply pull up the lever and move in the desired position backward by pushing or forward by hitching. As soon as the lever is released, the seat will lock into the new position.

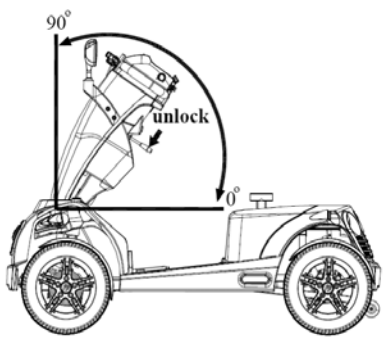


Caution: Check the seat has fully locked by hitching backwards and forwards.



8. Headrest Height Adjustment:

The headrest can be adjusted for height, giving you more back support if you are tall, by operating the small latch cushion up or push down for the most comfortable position.



9. Handlebar Adjustment:

The handlebar of your scooter is designed to allow you to position it in a comfortable driving position. It can be locked into numerous positions or unlocked to move freely for transportation.

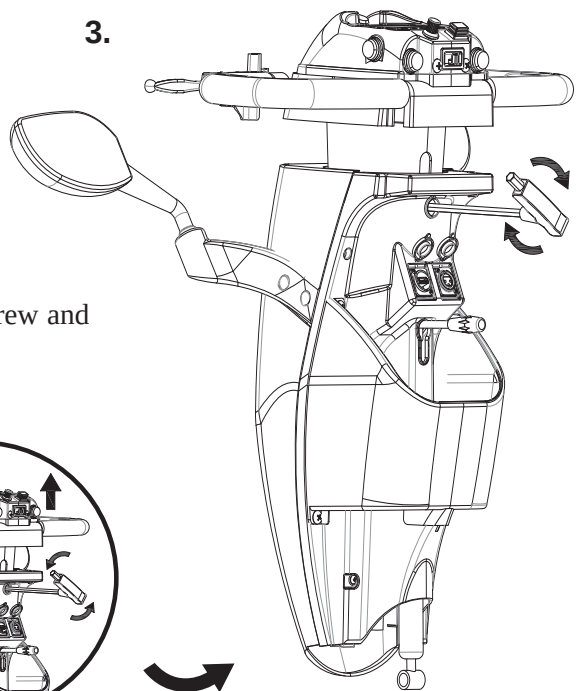
The handlebar lock is operated by a black lever positioned on the right hand side of the handlebar. To release the handlebar from a locked position pull the black lever upwards, the handlebar will now move freely, but under mild tension.

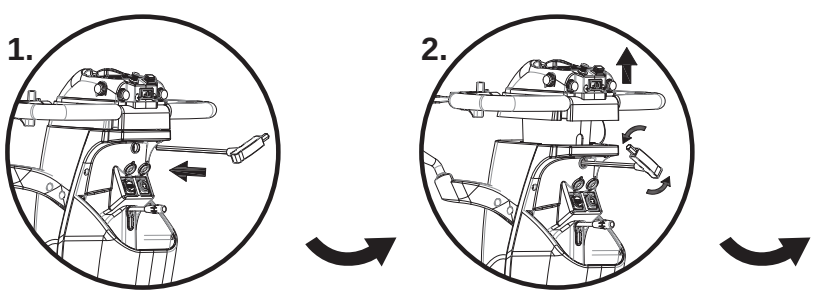
10. Tiller Height Adjustable:

The tiller of your scooter is designed to allow you to adjust in different height in a comfortable driving position. The handlebar lock is operated by a 10 mm hexagon screw positioned on the central of the handlebar.

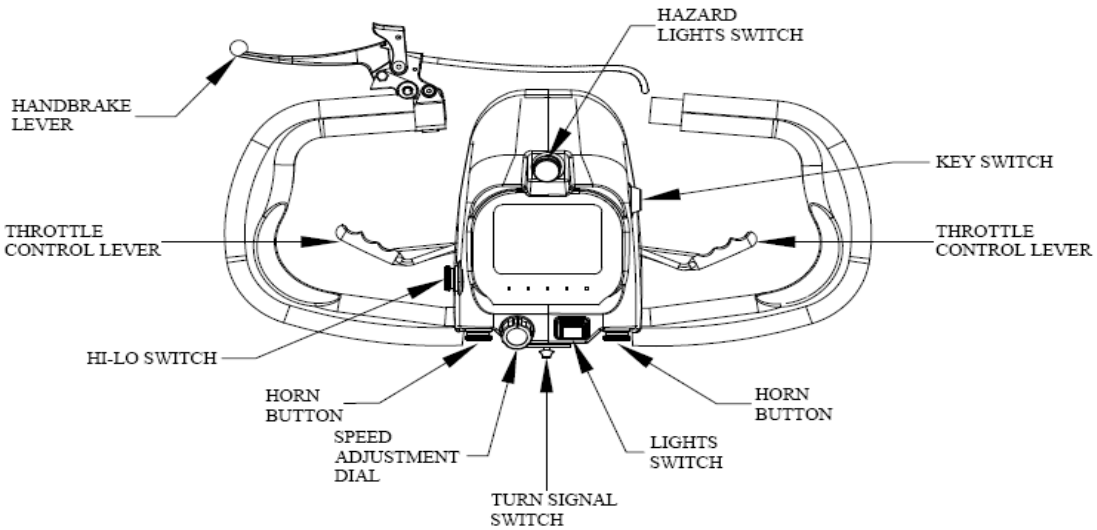
(1) Put 8 mm hex wrench into the hole.
(2) Counterclockwise turn the tool to relax screw and improves the top console to position.
(3) Clockwise turn the tool to lock screw.

3.



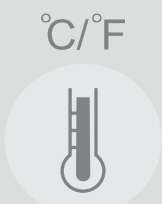
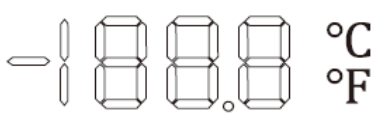


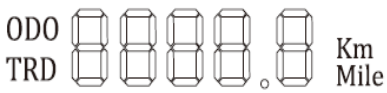
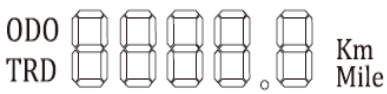
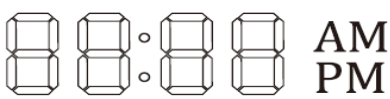
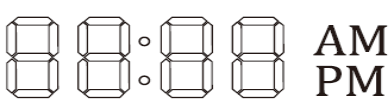
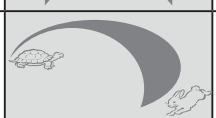
11. Control Features:



Your controls are located on the handlebar console they are:

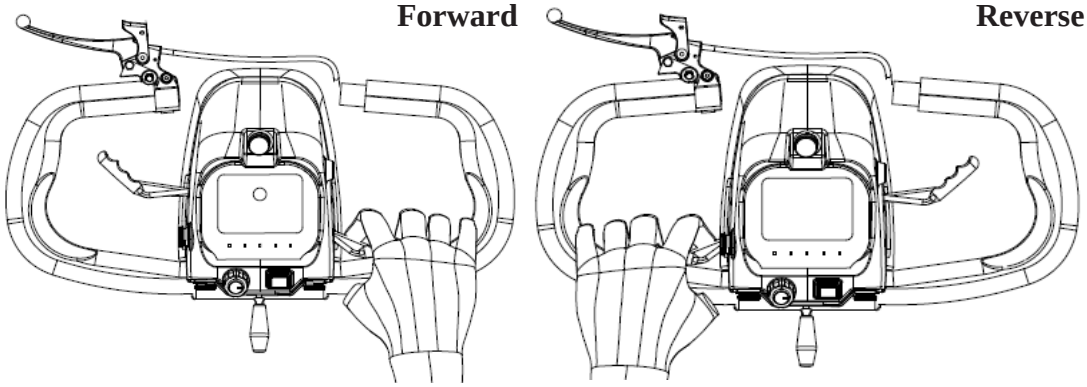
12. LCD Control Console:

	Sign	Function	Description
1		On-Off Power Switch	Will activate controller system and control panel
2		Batteries condition indicator	Bars will illuminate to show the level of charge in your batteries
3		Distance/Temperature /Time indicator	Will illuminate when power on and they also exhibit in different value
4		Direction indicator	Will illuminate when the direction switch is activated press to terminate.
5		Status light	The green light will illuminate at a constant rate when key switch on and will flash for identify faults
6		Half speed indicator	Will illuminate when the half switch is activated
7			Switch between Centigrade and Fahrenheit l. Short press for switching between Centigrade and Fahrenheit.

	Sign	Function	Description
8			Switch between Km and Miles 1. Short press for switching between kilometer and mile. 2. Program Setting Mode for Speed and Loadstone setting , please contact your authorized dealer for adjustment.
9			Reset the distance(range) 1. Short press to switch between ODO/TRIP. 2. Press sustained to reset TRIP. ODO = Odometer = Total distance TRD = Trip distance
10			Hour setting 1. Short press to increase hours value. 2. Press sustained H to increase hour value sustainability. 3. Will return normal (drive) mode after 3 sec. without setting.
11			Minute setting 1. Short press to decrease mlnute value. 2. Press sustalned M to decrease minute value sustainability. 3. Will return normal (drive) mode after 3 sec. without setting.
12		Left and right horn button	Press to sound a warning to other road users.
13		Speed Adjustment Dial	Allow to pre-select your desired top speed.
14		Front/Rear light switch	Simply push on and off to Front and rear light

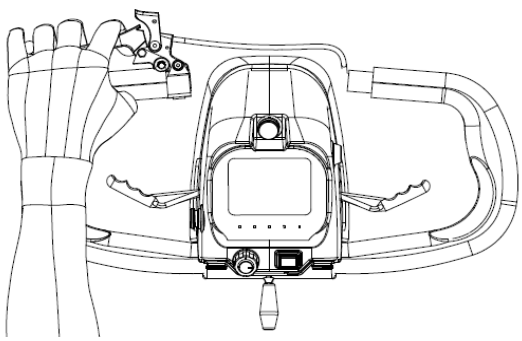
13. Forward, Reverse Control Lever (Wig wag):

Forward **Reverse**

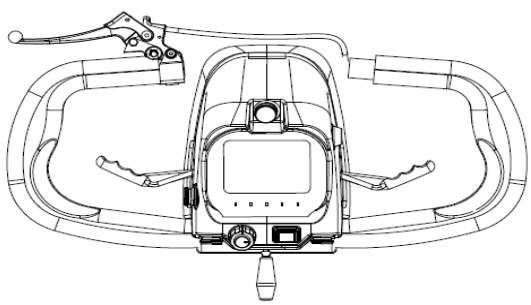


Your speed for forward and reverse motion and braking is controlled here.
The right thumb lever moves your scooter in a forwards direction and also controls the rate of speed by the proportional amount of pressure applied.
The left thumb lever moves the scooter in a reverse direction and controls the rate of speed by the pressure applied . The lever when released will return itself to the neutral position, and you will gently stop. You will note that you can obtain the reverse of this procedure by pulling the levers backwards with your thumb.

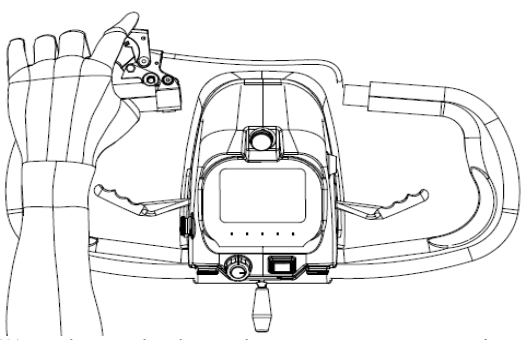
14. Emergency Brake:



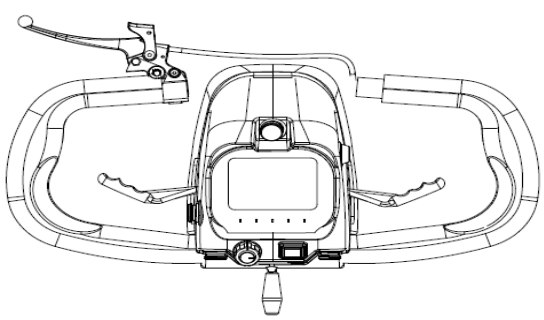
(1) Step on the brake lever.



(2) The scooter in braked on the condition that both of the brakes are stepped.



(3) Release the lever lets scooter can continue to use.



(4) Please exercise braking system until it proficient let you in dirving safety.

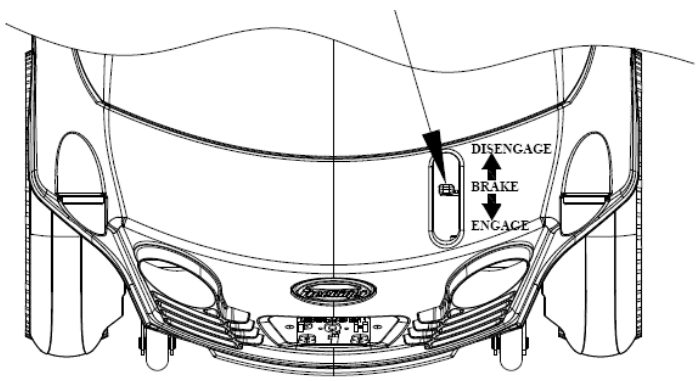
Emergency brake lever located on your steering handlebars, it will operate two brake mechanisms in two front wheels in the meantime when you grab the brake lever. Brake force can be adjusted by tightening the screw beside brake drums.

FREEWHEELING YOUR SCOOTER

If for reasons of convenience, or you require to push your scooter for a short distance, the drive system can be put into 'freewheel mode'. This will allow your scooter to roll freely.

1. Freewheel Procedure:
The freewheel device is a red lever located at the rear right hand side of your scooter.
To freewheel your scooter first switch off the power switch located on the scooter's control console.
Pull up the disengage lever until a distinct click is felt. You can now push your scooter with ease.

Please note, in this mode with the power switch in the off position, the braking safety system is automatically activated when the scooter is pushed quicker than walking speed, this is an automatic 'run away' safety checking system, it also reduces the risk of casual theft.



SAFETY INSTRUCTIONS & WARNING

ELECTROMAGNETIC AND RADIO FREQUENCY INTERFENCE (EMI/RFI)
Electromagnetic and Radio Frequency Interference can come from mobile phone, radio transmitters etc. In some cases, these waves can cause damage to control system. Your scooter has an immunity to EMI, the higher the immunity level, the greater the protection against EMI.
Your scooter has been tested and passed at the immunity level of 20 V/M.

Warning: Additional of accessories or components to your scooter can increase the susceptibility to EMI. **DO NOT** modify scooter in any way not authorized.

1. Safety Check:
We recommend that you perform a safety check before each use to make certain your scooter operates smoothly and safely.

(1) Check tire inflation, maintain at 40 p.s.i.
(2) Check all battery connections, make certain they are serviceable and not corroded.
(3) Check front basket is fitted correctly.
(4) Check batteries have been fully charged.
(5) Check operation of brakes.

Warning: **DO NOT** carry passengers on your scooter. Your scooter is designed for a single occupant which complies with legal requirements for pavement vehicles.
Carrying passengers on your scooter may result in personal injury and/or property damage.

We will not be held responsible for injuries and/or property damage resulting from failure to observe these weight limitations. Please also remember when carrying heavy objects that this will increase your total weight and may make your scooter unstable.

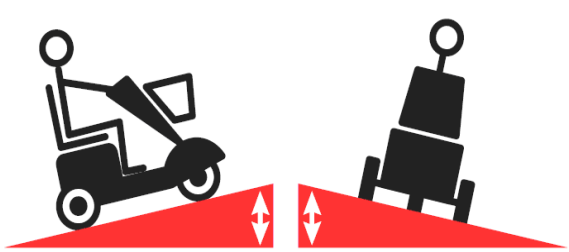
2. Inclines:
More and more modern buildings are designed with disability access in mind.
Ramps have specified percentage of inclination, designed for easy and safe access. Some ramps may have turning switchbacks (180 degree turns) that require you to have good cornering skills on your scooter.

(1) Take a wide arc with your scooter's front wheel around tight corners, your rear wheels will follow preventing you from cutting the corner short and bumping or getting hung up on raised currbs.

(2) When descending an incline keep your speed adjustment set to the slowest speed setting to ensure a safely controlled descent and driving in a forward direction **ONLY**. If your scooter descent is quicker than you anticipated allow the scooter to completely stop, then progress at a slower speed setting.

Warning: Never drive down an incline at full speed. When climbing an incline, try to keep your scooter moving, if you must stop, start up again slowly and then accelerate smoothly with caution. Avoid sudden stop starts, lean forward towards your handlebars to increase stability and prevent rearward tipping.

Warning: When climbing an incline, **DO NOT** zig-zag or drive at an angle up the face of the incline. Drive your scooter smoothly up the incline without stopping, this greatly reduces the possibility of a tip or fall.



6 degree maximum incline

SAFETY WARNING & INSTRUCTION LABELS

The following labels are positioned on your scooter, they communicate important warnings or instructions regarding the safe operation of your scooter. Please familiarize yourself with their location.

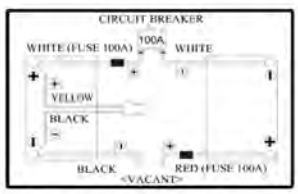
Control console

Located at front tiller cover

Located at front of battery cover

Located at rear top of rear cover

Located on top of steering rear cover

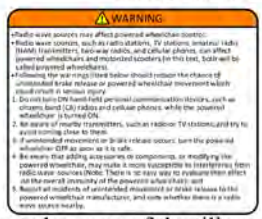


Located under the battery

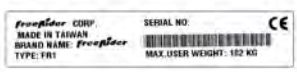
Located inside of foot plate

WARNING
EMERGENCY FREEWHEEL DEVICE
NEVER SIT ON YOUR SCOOTER WITH THE FREEWHEEL DEVICE IN THE DISENGAGED POSITION. ALWAYS RE-ENGAGE THE EMERGENCY FREEWHEEL DEVICE AFTER USE. FAILURE TO COMPLY WITH THIS WARNING MAY RESULT IN INJURY.

Located on top of rear



Located on rear of the tiller cover



Located at front

Located at all rims

Located at left side of top

Located at front

LEARNING TO GET ABOUT

1. Basic Driving:

Make certain you are comfortably seated on your scooter and both armrests are down. Ensure that the "Speed Adjustment Dial" is turned to minimum for your first drive. When you have become more confident you can increase the setting to a higher speed. Push the right "Thumb Lever Control" as described earlier. You will very gently move forwards. Release the lever, and you will gently stop. Practice these two basic functions until you get used to them. Steering the scooter is easy and logical by turning the handlebars in the direction you wish to maneuver.

2. Incline Control:

When you approach an incline, it is best to lean forward. This moves the center of gravity of your scooter towards the front of the scooter for improved stability. When going down an incline, keep your speed slow. This will keep you in a safely controlled descent. It is best to lean backwards, this moves the centre of gravity of your scooter towards the rear of the scooter for improved stability. If you wish to stop completely, release the control lever, and you will come to a gentle stop, avoid sudden stop starts.

3. Lock the Wheels:

Your scooter has two mechanism to help locking the wheels. The first, emergency brake lever located on your steering handlebars. It will operate two brake mechanisms in two front wheels in the meantime when you grab the brake lever. Brake force can be adjusted by tightening the screw beside brake drums. The second, Automatically Braking System, the braking system on your scooter is an electronic regenerative system on the rear-wheels. The brakes automatically apply when the levers are released(returned to neutral position).

Caution: Automatically Braking System The braking system on the Freerider FR1 is an electronic regenerative system on the rear-wheels.
The brakes automatically apply when the levers are released (returned to neutral position). Braking distance on a flat surface is approximately 8.73 feet in the forward direction and is approximately 8.83 feet in the reverse direction. The travel distance will vary based on the terrain travelled and the weight of the rider. The scooter is not recommended for use in soft or sandy soil, in long grass, on uneven surfaces, or on wet/icy pavement.

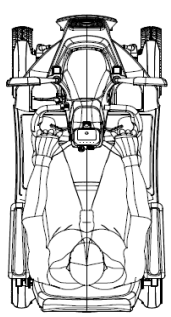
Normal driving position

Increased Stability driving position

Control over stationary obstacles

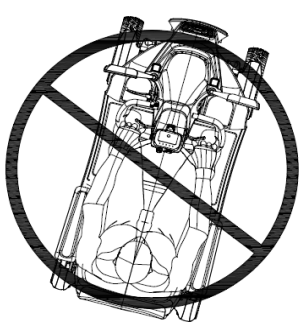
Stationery obstacle (steps, curbs etc.) must be avoided where possible. Proceed with extreme caution when driving near raise surfaces, unprotected ledges and/or drop offs such as curbs, porches, stairs etc.
Most new pavements have wheelchair access ramps at intersections, use these at all times. Plan your route where possible to avoid poor and uneven surfaces. **DO NOT** attempt to ride up or down curbs as you may ground your scooter and damage it's construction.

CURB



Correct

CURB



Incorrect

CARE & MAINTENANCE

Your scooter like any other electro-mechanical machine will benefit from regular servicing by your dealer. You too, can help keep your scooter in tip-top condition by following a simple guide to home maintenance.

*Note: **ONLY** competent people should carry out service work.*

1. SEAT UPHOLSTERY:
A damp cloth and a little soapy water will keep your seat, backrest and arms looking smart. **DO NOT** use abrasive cleaners as this will damage the coating. Upholstery can be damaged by chemical cleaners.
The coating material can also degrade over a period of time due to contamination by natural oils in the hair and skin or from medicated power products. Ultra-violet light can also reduce the life of the upholstery coating material. This is a normal ageing process and cannot be guaranteed.

2. BODYWORK:
The painted bodywork on your scooter can be lightly washed with clean soapy water. **DO NOT** use abrasive cleaners or strong detergents. This could fade the color; shampoo for automobile works well. Remove salt contact as this is very corrosive to bright metal parts.

Caution: DO NOT hose down your scooter with a powerful cleaner. Water could be forced into the electronics and cause permanent damage. On the painted finish, be cautious not to wash with a dirty cloth as this could scratch the paint finish. Auto polish can be used to keep the paintwork and bright chrome parts in pristine condition.

The metal framework of your scooter should be cleaned twice a year and any paintwork damaged should be treated to prevent further attack from the elements. Wash regularly if contact is made with road or sea salt, this is very corrosive.
DO NOT store your scooter in damp conditions. This may affect the electronics if left for very long periods of time. Moisture, if left unattended can cause deterioration on metal work, protect with proprietary cleaners.

3. ELECTRONICS:
Servicing of the drive electronics and charger should **ONLY** be carried out by your local service dealer. These units are sealed and should not be opened.

4. BROKEN SEALS WILL INVALIDATE YOUR GUARANTEE:
DO NOT operate your scooter in exceptional weather conditions, ie. very heavy rain or wind. Cover your machine up if it is to be left unattended and outside for a long period of time.
DO NOT drive through deep water with your scooter. This could damage the electronic speed controller. Sea and road salts are very corrosive and should be neutralized quickly.

5. MOTOR:
The motor on your scooter is fitted with four long-life brushes. The brushes should be inspected for wear every 12 months or more frequently if you use you scooter daily for long periods.

The brushes should be changed when they have worn down to approximately 8 mm in length.

6. DRIVE TRANSMISSION LUBRICATION:
This unit is factory filled and will not normally need additional lubrication.

Note: Our scooter transmission is filled with a special lubricant. ***DO NOT*** *attempt to force grease into the transmission as this will contaminate the original lubrication and will invalidate your guarantee.*

Caution: Take care when handling the transmission, keep well away from clothing. It is normal to find a light film of lubrication around this part.

7. MOTOR BRAKES:
Safety Note: For your own safety, we recommend that you check the function of your scooter brakes prior to a journey.

If the motor brake is functioning correctly and the drive is engaged you will not be able to push your machine when it is switched off. Or switched on with the speed control lever in the 'zero speed', central position.

Warning: If your machine can be pushed as described above, the motor brake could be faulty. Please **DO NOT** use, contact your local distributor.

Note: Check the Freewheeling Instructions of this manual.

8. DRIVING BRAKE:

Warning: When you drive your scooter and you let go of the speed control lever your scooter should reduce speed very quickly. If you notice a change in the normal slowing/braking condition of your scooter and it does not slow down quickly, please **DO NOT** use your machine, contact your dealer.

9. MANUAL EMERGENCY BRAKE:
The manually operated '**Emergency Brake**' is designed to be operated **ONLY** in the case of mechanical or electronic failure to the motor and driving brakes, previously mentioned.

Caution: On no account operate this brake in conjunction with the electronic motor brakes. Failure to observe this instruction may cause damage or premature wear to the motor and transmission system. The manual brake system can be adjusted for wear to the braking material by adjusting the operating cable length adjustment nut.

Warning: Brake adjustment should **ONLY** be carried out by service dealer, failure to observe this warning could put the brakes in an unbalanced state and may cause damage to you or your scooter.

10. TIRES:
Check the condition of your tires regularly. Look for signs of wear, cuts and foreign objects lodged in the tread. Maintain the tire pressures at all times; failure to comply with this can lead to poor performance of your machine and could make your machine unsafe and/or unstable. Tires should be replaced when the tread is worn to 0.5mm.

BATTERIES AND BATTERY CHARGING

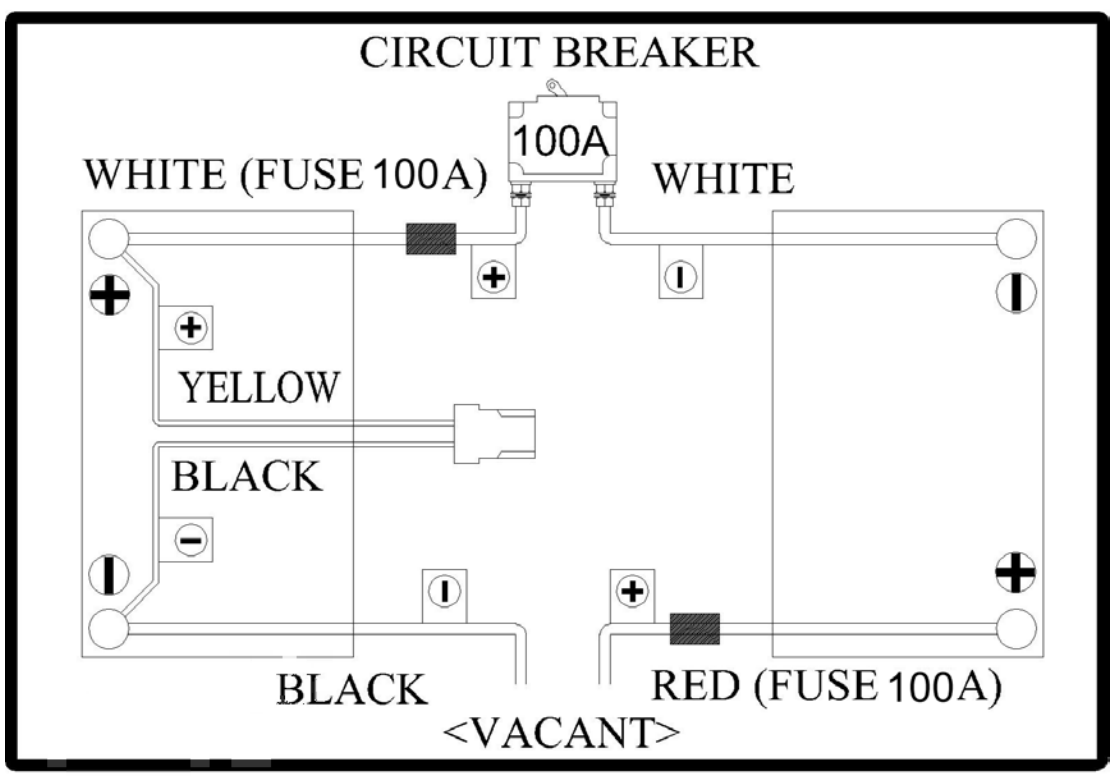
1. Battery Installation:

Your scooter is equipped with two maintenance free 12 volt 75Ah batteries. The batteries are linked together by wiring cables to supply the electronic system with 24 volts of power.

Warning: It is imperative that the two batteries are connected correctly to prevent a short circuit between the two batteries. When first installing the batteries follow these assembly instructions.

(1) Connect the labeled positive (+) wire to the positive (+) terminal of the battery, with the screw, nut and washer provided.
(2) Connect the labeled negative (-) wire to the negative (-) terminal of the battery, with the screw, nut and washer provided.
(3) Repeat this procedure on the second battery making certain the plastic red/black terminal covers are secured over each terminal.
(4) Sit on the seat and switch on your scooter, the battery meter will now move to show the state of charge in the batteries and your scooter is ready to drive.

Batteries circuit diagram

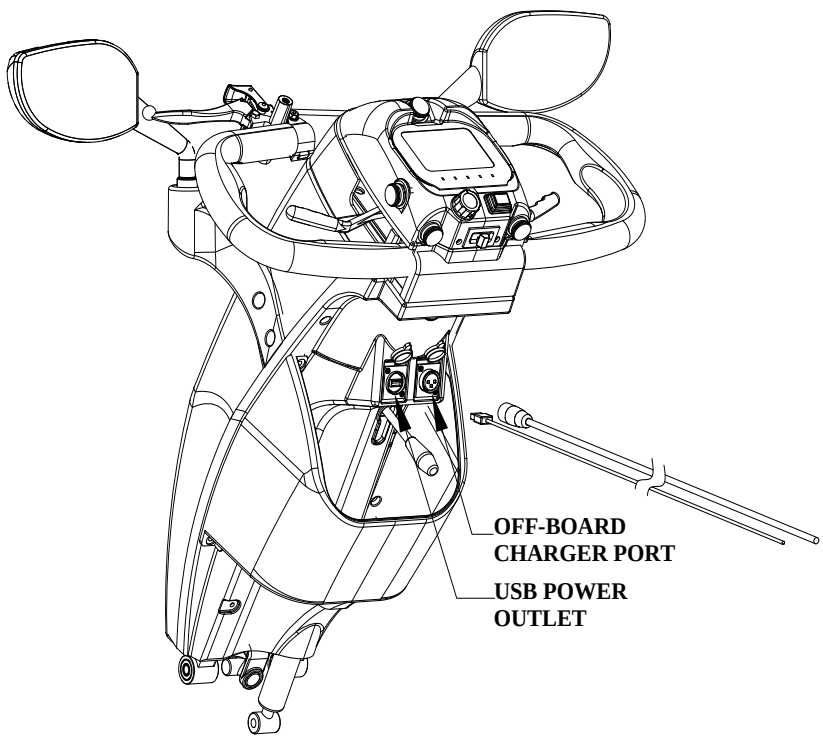


2. Battery Charging:
Your scooter has a lot of power. To ensure it works to its full potential you must maintain both batteries on full charge. Nightly recharging, after use, will help you to give them a longer life and will ensure your scooter is **ALWAYS** ready to go when you are. **ONLY** use the charger supplied with your scooter; other makes of charger may permanently damage your batteries and would invalidate the guarantee.

3. Battery Circuit Fuse:
The fuse protects your scooter battery circuit from receiving an overload of electrical current. The fuse used in the scooter is the same type which is found on automobiles. In the unlikely event that a fuse should 'blow' and needs replacing.
Please contact your dealer and accordance with the dealer's instructions working.
(**Dealer information please refer to the back cover**)

4. USB Power Outlet:
The USB connector on the left hand side of the charge socket allows you to charge small electronic devices.

Caution: The electronic devices must be turned off while plugged into the scooter while the scooter is in use.



BASIC FAULT FINDING

If your scooter will not start:

(1) Check the power key switch is turned "on". If it is, the battery condition indicator meter will be operating. If the green status light on your console is flashing once per second, charge your batteries.

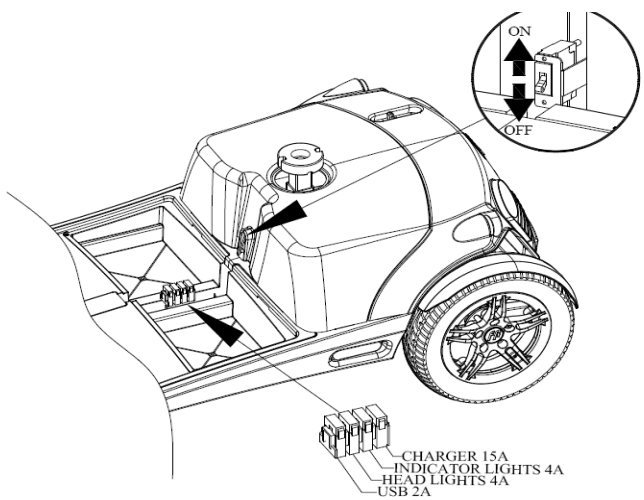
If the battery condition meter and the green status light fail to operate when the key switch is in the "on" position, check the following:

(2) Make sure the battery charger is not plugged into the tiller charge socket, this will prevent drive.

(3) Check both battery connectors. Check battery terminal condition.

(4) Check the "circuit breaker".

If your scooter stops for no apparent reason, it is probably due to the circuit breaker disconnecting from the speed control electronic box.



On rare occasions, a temporary overload on the electric circuit can occur – for instance when climbing a steep incline. If this happens, reset the circuit breaker, wait for two minutes to allow the temperature activated switch to cool down. Locate the plunger on the circuit breaker through the access hole. Place a finger onto the circuit breaker and press down on the plunger until it remains down. You are now ready to drive again. If the circuit breaker trips up again wait for 5 minutes and try again.

1. Fault Diagnosis:

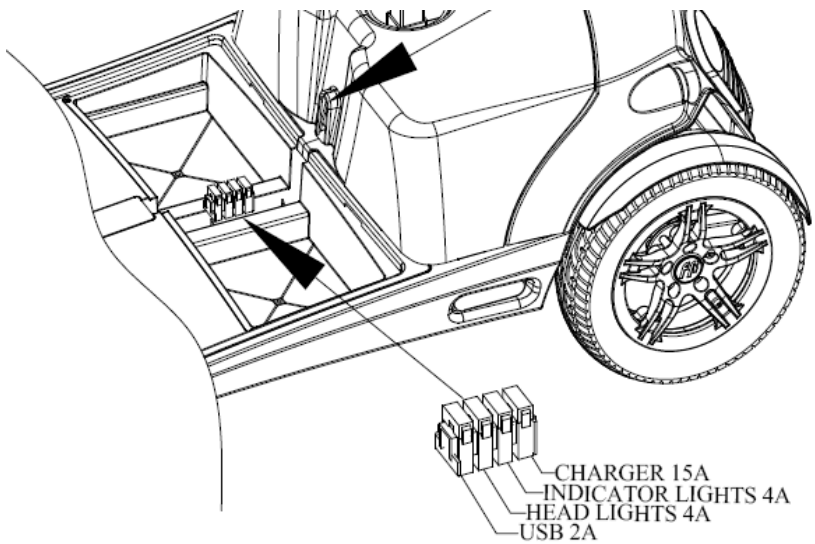
Faults with the main speed controller are rare. Most faults on powered vehicles are associated with wiring or misconnections due to poor maintenance or incorrect installation of connectors when assembling the Scooter after transportation in a car.

If your scooter should fail to operate, you will be assisted in diagnosis and locating the area of the fault by observing the number of flashes emitted from the 'green' status light on your control console.

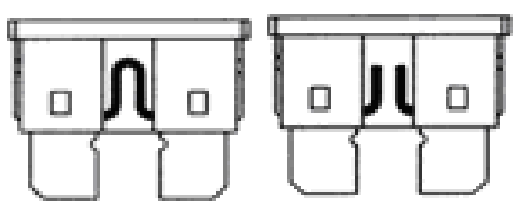
2. Charging Circuit Fuse:
One fuse protects your scooter charging circuit from receiving an overload of electrical current. The fuse used in the scooter is the same type which is found on automobiles. In the unlikely event that a fuse should 'blow' and needs replacing. Please use fuse with the recommended fuse rating. Please note this size of fuse has been selected to give your scooter the best protection without premature fusing.

Warning: Please confirm to the recommended fuse rating, or may cause permanent failure to the wiring and wiring connectors or personal injury.
For access to a fuse, removing the four screws which located in the rear body cover, lift cover locate and lift the fuse block, lift up the fuse lid. Replace the blown fuse and close fuse lid and replace fuse block.

Recommended fuse rating:
(1) Charger 15A
(2) Indicator lights 4A
(3) Head lights 4A
(4) USB 2A



Please note this size of fuse has been selected to give your scooter the best protection without premature fusing.

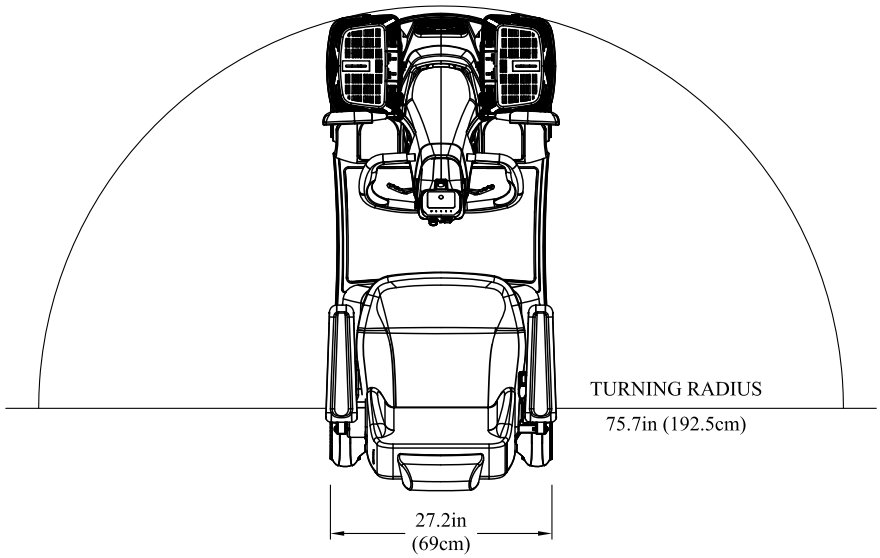


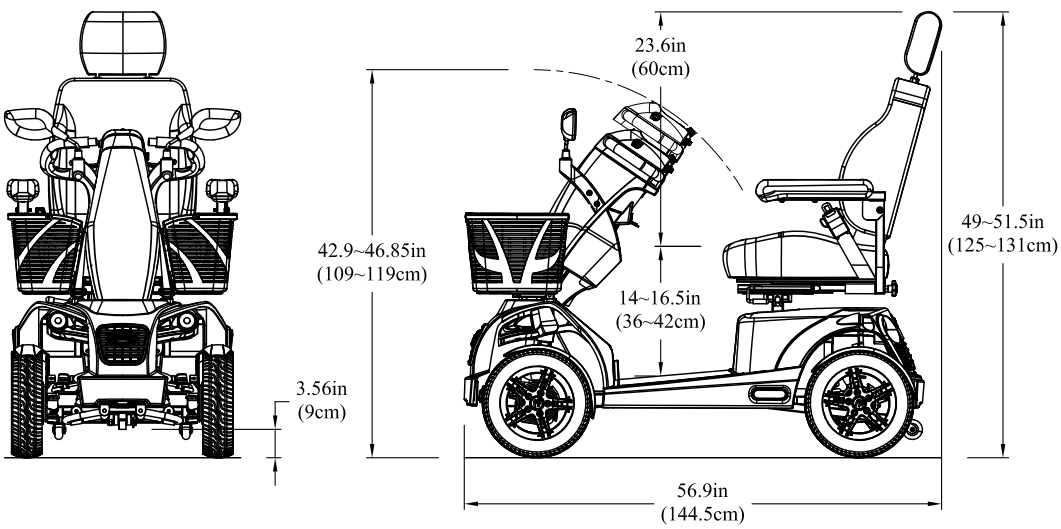
3.Status Fault Codes:

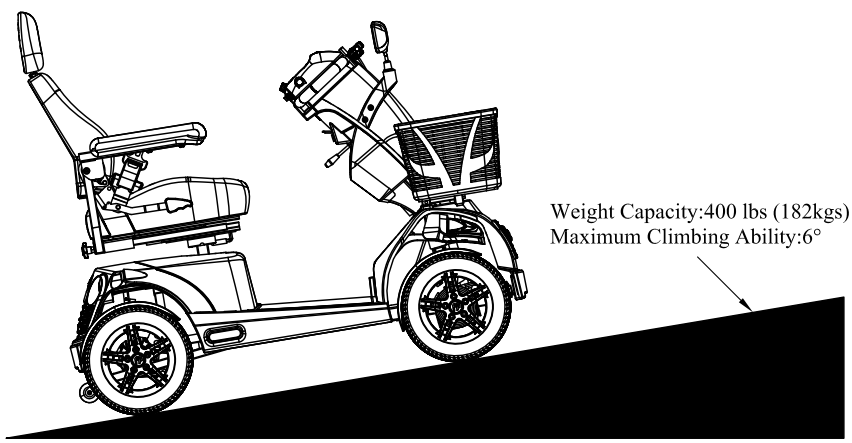
Flash	Description	Meaning
1	Battery Low	The batteries are running low. ●Recharge the batteries.
2	Low Battery Fault	The batteries have run out of charge. ●Recharge the batteries. ●Check the battery and associated connections and wiring.
Note: The low battery fault flash code,described above, is a requirement of various safety standards. The scooter will output a visible and audible low battery warning if the battery voltage drops below 90% of its cut-off voltage. *The warning will be two short flashes, and will take priority over all other flash codes in the system.*		
3	High Battery Fault	Battery voltage is too high. This may occur if overcharged &/or travelling down a long slope. ●If travelling down a slope, reduce your speed to minimise the amount of regenerative charging.
4	Current Limit Time-out	The motor has been exceeding its maximum current rating for too long. ●The scooter may have stalled. Turn the controller off, leave for a few minutes and turn back on again. ●The motor may be faulty. Check the motor and associated connections and wiring.
5	Park Brake Fault	Either a park brake release switch is active or the park brake is faulty. ●Check the park brake and associated connections and wiring. ●Ensure any associated switches are in their correct positions.
6	Throttle OONAPU (Out Of Neutral At Power Up)	Either a stop function is active or a charger inhibit or OONAPU condition has occurred. ●Release the Stop condition (seat raised etc.) ●Disconnect the battery charger ●Ensure the throttle is in neutral when turning the controller on. ●The throttle may require re-calibration.
7	Speed Pot Fault	The throttle, speed limit pot, their associated wiring may be faulty. ●Check the throttle and speed pot and associated connections and wiring.
8	Motor Voltage Fault	The motor or its associated wiring is faulty. ●Check the motor and associated connections and wiring.
9	Other Error	The controller may have an internal fault. ●Check all connections and wiring.

TECHNICAL SPECIFICATION

Model Number	**FR1**
Maximum Safe Slope	6 degree
Maximum Climbing Ability	6 degree
Maximum Obstacle Climbing Ability	2.36 inches (6 cm)
Colors	Metallic Gray / Metallic Orange
Overall Length	56.9 inches (144.5 cm)
Overall Width	27.2 inches (69 cm)
Total Weight with Batteries	365.6 lbs. (165.8 kg)
Front Axle Weight	99.2 lbs. (45 kg)
Rear Axle Weight	150 lbs. (68 kg)
Total Weight Without Batteries	251.6 lbs. (114.4 kg)
Battery Weight Each (75Ah)	57 lbs. (26 kg)
Turning Radius	75.7 inches (192.5 cm)
Reversing Width-tiller Steering	88.98 inches (226 cm)
Speed (Maximum)	9.37 mph (15 kph)
Range Per Charge	32.5 miles / 52 km (Tested at 90 kg (198 lbs)) 29 miles / 46.4 km (Tested at 182 kg (400 lbs))
Ground Clearance	3.56 inches (9 cm)
Weight Capacity	400 lbs. (182 kg)
Standard Seating	Type: Foldable Weight(w/armrests): 37.4 lbs. (17 kg) Material: Black Dimensions: 17 inches (43 cm) width & depth
Drive System	Rear-wheel drive, sealed transaxle, 24 volt DC motor
Suspension	Front and rear shock absorber
Dual Braking System	Electronic, regenerative, and electromechanical
Tires	Type: pneumatic Front and rear: 13 inches
Battery Requirements	Type: two 12 volt, deep cycle, Lead Acid Size: 75 Ah
Battery Charger	8-amp charger


TURNING RADIUS
75.7in (192.5cm)
27.2in
(69cm)


23.6in
(60cm)
42.9~46.85in
(109~119cm)
14~16.5in
(36~42cm)
49~51.5in
(125~131cm)
3.56in
(9cm)
56.9in
(144.5cm)


Weight Capacity:400 lbs (182kgs)
Maximum Climbing Ability:6°

CLASSIFICATION

Type 'B' indoor / with some outdoor capabilities (EN12184:1999) Class 2 (Highway Regulations 1988).
Maximum safe climbing angle: 6 degree

Warning: The safe climbing angle is measured with the seat in the highest position, and a weight capacity of 400lbs (182 kg). The motor on your scooter is powerful and may be able to climb a steeper incline than the maximum safe climbing angle. Exceeding the safe climbing angle may put you at risk of injury. On no account must you attempt to climb an incline of more than 6 degrees. This will exceed the rear stability of your scooter.

Maximum Speed: Up to 9.37 mph (15 kph) +/-10%

Range: 32.5 miles / 52 km (Tested at 90 kg (198 lbs))
29 miles / 46.4 km (Tested at 182 kg (400 lbs))

Note: *Range varies with weight, terrain, temperature, battery condition etc. and is subject to manufacturing tolerances. Your battery will require a period of "breaking in" before they will reach their optimum capacity (up to 20 charge, discharge cycles can be expected) before full range is experienced. Refer to the battery charging section of this manual.*

Tire Size: Front & Rear 13 inches

Batteries: Lead Acid battery 75Ah

Charger: AC input.100-240 volt, 50/60Hz,
DC output 24 volt. 8 Amp for Lead Acid battery
Conforms to: EN60335-2-29 and EN12184
EN12184:1999 (Clause 9.8)
EN55022:2010, Class B
IEC61000-4-2/ IEC61000-4-3

EMI/RFI: Field strength tested to 20V/m compliance.

Electrical System: 24 volt DC

Drive System: Rear wheel, direct drive via sealed drive axle.

Motor: 24 volt DC. Permanent magnet totally enclosed for outdoor use.

Brake: Automatic dynamic regenerating braking system with spring activated magnetic solenoid parking brake and freewheel facility.

Tiller: Adjustable locking for driving comfort.

Speed Control: Proportional state of the art design for safety and smooth operation incorporated with "Fault" diagnosis.

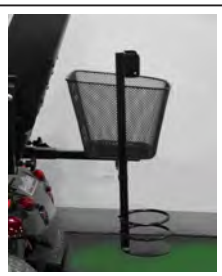
Seat: Contoured adjustable seat with height adjustment. Armrest with Multiple width adjustments.

Charge Socket: Located on the rear tiller cover. (Complies with EMC Directive 89/336/EEC and with Medical Devices Directives 93/42/EEC.)

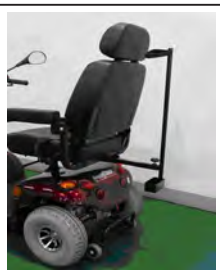
OPTIONAL ACCESSORIES

For information and installation method regarding these optional accessories, please contact your authorized agent. (**Dealer information please refer to the back cover**)

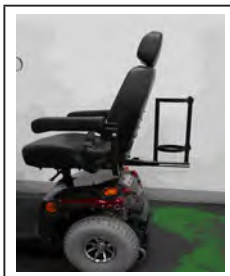
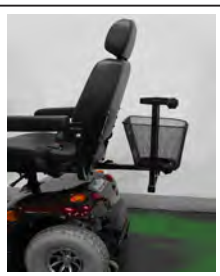
Combined Basket, Stick/Crutch Holder:

	Combining the usefulness of the rear basket and the stick/crutch holder.

Stick/Umbrella Holder:

	Ideal way to carry walking aids.

Oxygen Holder:

 	Conveniently fits over the seat back rest, designed to accept a standard mobile N.H.S. issue oxygen bottle.

Saddle (SEAT) Bag:

	Looking for somewhere to store rainproof hats, scarves and gloves, just in case you get caught out in a shower? Use the saddle storage bag.

GUARANTEE TERMS

Please keep a note of your serial number.
(This is located on the front frame tube, under the front chassis cover).

Your scooter is guaranteed for 12 months from the date of purchase against faults arising due to defects in manufacture or materials. This guarantee does not detract from, but is in addition to your legal rights. Parts replaced or repaired under the terms of this guarantee will be covered for the balance of the 12 months period.
This guarantee applies **ONLY** to parts supplied or approved by authorized distributor.
This guarantee is not transferable.

Note: Extended guarantee insurance can be arranged by your distributor, he will be able to advise the extra cost of this cover.

METAL WORK:
Metal components, such as the framework and bright metal parts require special attention and may deteriorate in certain conditions. Moisture and salt may corrode parts left unattended, proprietary auto cleaner polishes should be used to prevent long term damage. Failure to clean and protect these components may void your warranty.

SPEED CONTROLLER:
Servicing of the speed controller or battery charger must **ONLY** be carried out by your local authorized distributor.
Any attempt to open or dismantle these items render the guarantee void on that item.

BATTERIES:
Batteries carry a limited 12 month guarantee from the original manufacturer which is subject to a stringent wear and tear clause. Any battery faults due to a defect in the original manufacture will normally become obvious within the first two months of use. Any gradual deterioration in the performance after this period is normal and associated with fair wear and tear, mis-use or accidental damage and as such is not covered by the manufacturers warranty. (Batteries are guaranteed as single parts, **ONLY** the failed part is replaceable).

Warning: **DO NOT** attempt to open the battery vent plugs.

SERVICE HISTORY

This section is designed to assist you in keeping a record of any service and repairs to your scooter. If you decide to sell or exchange your scooter in the future, this will prove most helpful to you. Your service agent will also benefit from a documented record and this book should accompany the scooter when service or repair work is carried out. The service agent will complete this section and return the book to you.

DETAILS OF WORK CARRIED OUT	DEALER STAMP
	DATE INITIALS

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	DATE INITIALS

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	DATE INITIALS

YOUR LOCAL DEALER
(TO BE FILLED IN BY LOCAL DEALER)

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